

UNIPOLAR DRIVE TOPOLOGY FOR PERMANENT MAGNET BRUSHLESS DC
MOTORS AND SWITCHED RELUCTANCE MOTORS

ABSTRACT OF THE DISCLOSURE

A unipolar drive includes a booster, an energy storage module, and a unipolar inverter. The booster increase a voltage received from a power supply to
5 produce an energy output. The energy storage module store at least some of the energy output by the booster. The unipolar inverter energizes windings of a motor using energy from the booster and returns energy from the windings to the booster when the windings are not being
10 energized.